

SAFETY AND BUILDINGS DIVISION
Plumbing Product Review
P.O. Box 2658
Madison, Wisconsin 53701-2658
TTY: Contact Through Relay

Jim Doyle, Governor Richard J. Leinenkugel, Secretary

October 20, 2008

CULLIGAN INTERNATIONAL ANNA K. LEVOY 9399 W HIGGINS RD SUITE 1100 ROSEMONT IL 60018

Re: Description: WATER TREATMENT DEVICE-REVERSE OSMOSIS

Manufacturer: CULLIGAN INTERNATIONAL

Product Name: GOOD WATER MACHINE DRINKING WATER SYSTEMS (POU)

Model Number(s): AC-30, AC-30 PLUS, AC-30L, AC-30L PLUS, AC-30M AND AC-30M PLUS

Product File No: 20080472

The specifications and/or plans for this plumbing product have been reviewed and determined to be in compliance with chapters Comm 82 through 84, Wisconsin Administrative Code, and Chapters 145 and 160, Wisconsin Statutes.

The Department hereby issues an approval based on the Wisconsin Statutes and the Wisconsin Administrative Code. This approval is valid until the end of October 2013.

This approval is contingent upon compliance with the following stipulation(s):

- ➤ This product has undergone sufficient testing to document the product's ability to reduce only those contaminants and/or substances as specified in this approval letter when the product is installed and maintained in strict accordance with the manufacturers published instructions.
- ➤ Where the Department of Natural Resources (DNR) has jurisdiction, a written approval may be required prior to installation of this product in a water supply system to reduce the concentration of a contaminant that exceeds the primary drinking water standards contained in ch. NR 809, Wis. Admin. Code, the enforcement standards contained in ch. NR 140, Wis. Admin. Code, or for a water supply system that is subject to a written advisory opinion by the DNR. For more information contact the DNR Section of Private Water Systems, P.O. Box 7921, Madison, WI 53707, telephone (608) 266-3415.
- If these approved devices are modified or additional assertions of function or performance are made, then this approval shall be considered null and void, unless the change is submitted to the department for review and the approval is reaffirmed.
- ➤ The system shall be provided with an in-line total dissolved solids (TDS) monitor, or other acceptable means, to warn the user when the system is not performing it's functions. Acceptable alternatives to an in-line TDS monitor include:
  - 1. terminating the discharge of treated water;
  - 2. sounding an alarm which is connected to acceptable power source;
  - 3. flashing a light connected to an acceptable power source;
  - 4. providing the user with an obvious, readily interpretable, indication of the system's ability to perform (e.g. decreasing the flow rate of treated water by 50% or more for systems making mechanical filtration claims;
  - 5. Providing a sampling service by the manufacturer, either directly or through an authorized dealer, a minimum of once every six months;

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(continued from previous page)

- 6. Providing a sampling kit for analysis of TDS or other appropriate contaminants; or
- 7. Providing a TDS monitor to measure the product water quality.

Whichever means of performance verification is selected, it shall be clearly described in the owner's manual for this device, and approved for use along with the device.

Based on testing data submitted to and reviewed by the department, this approval recognizes that these plumbing products will reduce the concentration of contaminants as specified on pages 1 through 3 of this letter.

## HEALTH EFFECTING INORGANIC CONTAMINANT REDUCTION CAPABILITIES PRODUCT FILE NUMBER 20080472 TABLE 1 OF 1

Production Rates: 54.9 liters per day (lpd) [14.5 gallons per day (gpd)]

Tested Contaminant	Influent Challenge Concentration (mg/l <sup>*</sup> ) <sup>1</sup>	Max. Permissible Effluent Concentration (mg/l <sup>*</sup> ) <sup>1</sup>
Barium (Ba <sup>+2</sup> ) <sup>2</sup>	10.0 ± 10%	2.0
Cadmium (Cd <sup>+2</sup> ) <sup>2</sup>	0.03 ± 10%	0.005
Hexavalent Chromium (Cr+6) 2	0.3 ± 10%	0.1
Trivalent Chromium (Cr <sup>+3</sup> ) <sup>2</sup>	0.3 ± 10%	0.1
Copper (Cu <sup>+2</sup> ) <sup>2</sup>	3.0 ± 10%	1.3
Lead (Pb <sup>+2</sup> ) <sup>2</sup>	0.15 ± 10%	0.010
Radium 226/228 (Barium surrogate) <sup>3</sup>	25 pCi/l	5 pCi/l
Selenium (Se <sup>+4</sup> and Se <sup>+6</sup> ) <sup>2</sup>	0.10 ± 10%	0.05
Total Dissolved Solids (NaCl)	750 ± 40	187

**Other Conditions:** the contaminant reduction performance capabilities displayed for Table 1 of 1 were verified by testing conducted in accordance with NSF *International* Standard 58. To qualify for a specific contaminant reduction claim, the system shall reduce the influent challenge concentration so that the arithmetic mean of all effluent sample results, and 90% of the individual effluent samples, are ≤ the maximum permissible effluent concentration.

- 1 = milligrams per liter (mg/l) are equivalent to parts per million (ppm)
- 2 = metals are tested at pH 6.5 and pH 8.5
- 3 = barium is used as a surrogate based on its relationship with radium on the periodic table and the difficulty in using radium for routine testing.

pCi/I = picocuries per liter

- \* = unless otherwise specified
- ≤ = less than or equal to
- $\pm$  = plus or minus

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This device was tested under controlled laboratory, or field, conditions. The actual performance of this device for a specific end use installation will vary from the tested conditions based on local factors such as water pressure, water temperature and water chemistry.

The department is in no way endorsing this product or any advertising, and is not responsible for any situation which may result from its use.

Sincerely,

Glen W. Schlueter
Engineering Consultant-Plumbing Product Reviewer
Bureau of Integrated Services
Safety and Buildings Division
Department of Commerce
(608) 267-1401 **Phone**(608) 267-9566 **Fax**glen.schlueter@wi.gov **Email**8:00AM – 4:30PM CDT **Work Hours** 

GWS:gws